

REMARKS

By this Amendment, claims 1, 10, 12, 22, 23, 26, and 36 -50 are amended, and claims 2 and 13 are cancelled without prejudice to or disclaimer of the subject matter contained therein. Support for the amended claims can be found throughout the specification, as originally filed. Accordingly, no new matter is added. Currently, claims 1, 3, 10-12, 14, 20, 22-26, and 30-51 are pending in this application, claims 23-26 and 30-35 having been withdrawn by the Office as directed to a non-elected invention.

I. *Claim Objections*

The Office objects to claim 1 for inclusion of various commas in the claim, and to claim 37 for recitation of "consisting of". (Office Action at page 2.) Applicants note the Office's suggestion with regard to claim 1, but contend that the commas in claim 1 are appropriate and in accordance with standard U.S. English grammar rules. Applicants submit that the claim is clear and precise as written. Accordingly, Applicants request that the objection to claim 1 be withdrawn. With regard to claim 37, the term "consisting of" has been removed from the claim to improve the clarity of the claim. It is noted that this amendment does not change the scope or content of the claim. In view of these comments and amendments, Applicants request that the objections be reconsidered and withdrawn.

II. *Rejection Under 35 U.S.C. § 112, second paragraph*

The Office rejects claims 1-3, 10-14, 20, 22, and 36-51 under 35 U.S.C. § 112, second paragraph, as indefinite. (Office Action at page 3.) The Office states that the description of certain proteins is unclear, and suggests re-phrasing certain claims to recite proteins using the phrase "except that it is mutated at...". By this Amendment, Applicants have amended claims 1, 10, 12, 22, and 36-50 to read as the Office suggests. Applicants note that the amendments to the claims that address this rejection do not alter the scope or content of the claims, but merely re-word the claims to improve clarity. Applicants believe that the amendments to these claims address the rejection under 35 U.S.C. § 112, second paragraph, and thus request that the rejection be reconsidered and withdrawn.

III. *Rejection Under 35 U.S.C. § 112, first paragraph*

A. Written Description

The Office rejects claims 1, 10-12, 20, and 22 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. The Office states that Applicants have not shown any enzyme other than DNA polymerase and reverse transcriptase that possesses 5'-3' polymerization activity. By this Amendment, Applicants have amended independent claims 1 and 12 to recite that the first enzyme "is a DNA polymerase or reverse transcriptase". Applicants note that withdrawn independent claim 26 is similarly amended. In view of the

amendments to claims 1 and 12, Applicants request that the Office reconsider and withdraw the rejection of claims 1, 10-12, 20, and 22 as lacking adequate written description.

B. Enablement

The Office further rejects claims 1, 10-12, 20, and 22 under 35 U.S.C. § 112, first paragraph, as lacking full enablement. (Office Action at page 6.) More specifically, the Office asserts that the application fails to fully enable enzymes "consisting of an amino acid substitution" and all enzymes having a 5'-3' polymerization activity of a DNA polymerase or reverse transcriptase. Applicants respectfully traverse this rejection as it applies to the current claims.

By this Amendment, the claims have been amended to clarify language directed to amino acid sequences of the recited enzymes. Applicants believe that the claim amendments address the first aspect of the rejection. Accordingly, Applicants request that the Office reconsider and withdraw at least this aspect of the rejection.

In accordance with the discussion above with respect to the asserted written description inadequacy, Applicants submit that the present claims are fully enabled. Applicants submit that the claims reflect the subject matter indicated by the Office as being fully enabled. Accordingly, Applicants request that the Office reconsider and withdraw this aspect of the rejection.

Applicants believe that the amendments to the claims made herein address the rejections under 35 U.S.C. § 112, first paragraph, and thus request that the rejections be reconsidered and withdrawn.

IV. *Double Patenting*

The Office provisionally rejects claims 1-3, 10-14, 20, 22, and 36-51 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 64-70 and 75-87 of copending U.S. Patent Application No. 10/079,241. (Office Action at page 9.) Applicants acknowledge this provisional rejection and request that the Office hold the rejection in abeyance until one or the other application is in condition for allowance. At that time, Applicants will file a Terminal Disclaimer in the application that has yet to be allowed, if necessary at that time.

V. *Conclusion*

Applicants believe that all of the issues raised in the Office Action have been addressed herein. Applicants thus request that the Office reconsider the objections and rejections set forth in the outstanding Office Action, withdraw them, and pass this application to issue in due course. Applicant further request that the Office consider rejoinder of the non-elected claims once the elected claims have been allowed.

If the Office believes that anything further is necessary in order to place this application in even better condition for allowance, Applicants request that their undersigned representative be contacted at the telephone number below.

Please grant any extensions of time required to enter this response and charge any additional required fees to our Deposit Account No. 50-3740.

Respectfully submitted,
Holly HOGREFE et al.



Date: 31 August 2007

By: _____
Matthew T. Latimer
Reg. No. 44,204

LATIMER, MAYBERRY & MATTHEWS, IP LAW, LLP
13873 Park Center Road
Suite 122
Herndon, VA 20171
703-464-3070